Since Jason Wood purchased the Zimmatic® by Lindsay dealership at Mt. Hope in central Kansas in 2009, he has added a second location at St. John, Kansas, increased pivots sales and volume, moved to a virtually paperless recordkeeping system, and stressed new technology.

Helping to run this family-owned dealership is Wood’s wife Heather, son Landon, daughter Brooklynn, and 24 dedicated employees.

Q: How has 96 Agri Sales changed over the years?
96 Agri Sales has a young, knowledgeable and dedicated group of employees. We stress efficiencies internally and for our customers. We have a goal that, for every standard service call, we have someone there within six hours and have the customer up and running in four hours. All of our billing, recordkeeping and ticketing is virtually paperless.

Q: What makes Zimmatic products stand out?
Lindsay is a technology leader. At 96 Agri Sales, we push FieldNET extremely hard and our growers are starting to see the benefits and the efficiencies of it. Pivot Control is a great new product. Parts and service are also key. We stock approximately $2 million worth of parts between our two stores. I’m optimistic about the long-term future of our dealership and agriculture.
La Cense Montana is a thriving 88,000-acre (35,612 ha) working cattle ranch 10 miles (16 km) south of Dillon, Montana. The ranch sits at 5,300 feet (1,615 m) in elevation, in the foothills of mountains soaring to peaks upwards of 8,500 feet (2,591 m). This scenic beauty was one of the first ranches settled in the area, and since 2002 the ranch has been producing certified natural beef.

**Philosophy on ranching & management**

La Cense has made a commitment to respect the animals, land, and environment with a focus on compassionate ranching techniques. It’s critical to follow a management plan that creates a balance between healthy wildlife populations, sustainable ranching, and resource conservation. One method that helps the ranch strike this balance is Managed-intensive Grazing (MiG).
Increasing quality, profitability and satisfaction

Today, utilizing Managed-intensive Grazing, Zimmatic by Lindsay center pivots, and winter grazing has given the ranch a boost in profitability by lowering inputs while meeting the growing consumer demand for natural beef.

In the early days, the ranch marketed its beef products directly to consumers and some retailers. When demand increased, it shifted the operation to producing natural Black Angus beef, or feeder cattle, that are sold to other producers for finishing before the beef is sold to high-end retailers, like Whole Foods®.

Many growers believe that when done well, their operations are not only dramatically more profitable using MiG, but also more enjoyable. “It challenged us to look at some different ways of doing business and looking at lower inputs to run the ranch,” says Ranch Manager Race King.

Flexibility is key to realizing full benefits

Adopting Managed-intensive Grazing and growing grass under pivots on 3,500 acres (1,416 ha) helps the ranch in multiple ways. Improved animal temperament and productivity, conservation of environmental resources, and improved soil health are all benefits the ranch gained by using MiG. In addition, costly fertilizer input has decreased because the cows are putting nitrogen back on the fields as they graze. King says growers will see inputs continue to go down as soil health improves.

He says the flexibility of this method is key – it strikes a balance with nature, and works within the climate limitations of where you farm.

Reduced labor costs

“I think a lot of people when they first look at these intensive grazing situations – especially on irrigated ground – they think the labor has just got to be way too high,” says King. “What we find is that it’s really a labor savings for us. We feel like we’re more efficient with our people. We think it’s easier on us because the livestock really do the majority of the work.”

Pivots & dealer support play a critical role

Zimmatic pivots offer La Cense Montana a level of predictability that Mother Nature cannot. “We get a very good return on investment with our pivots,” says King. “We’ve been real happy, obviously, with the quality of the product. The main reason that we chose to go with Zimmatic is because that is the dealer network we are comfortable with.”

The ranch has been a Zimmatic customer for over 30 years and is serviced by Intermountain Irrigation and Zimmatic dealer Jim Richardson. Richardson is impressed by what the current landowner, William Kriegel, and ranch manager Race King have been able to accomplish.

“They are tremendous stewards of their land,” says Richardson. “They search for maximum production, but at the same time, they’re very conscientious in not using more water or fertilizer than they need, and taking...
good care of their property so it has proper cover and vegetation. They take great pride in how they treat their herd, which is a large herd.”

**How does it work?**
Managed-intensive Grazing is a change in land practice. Traditionally, almost all of the ground is used to grow a hay crop that is cut and baled, and then that alfalfa is used for feeding the herd during the winter months. With MiG, a large number of the herd is on the ranch during the summer, eating forage, and the pivots are used to grow the maximum amount of grass forage possible.

King explained that by creating small “paddocks” inside a larger pasture with portable fencing, the animals move to fresh pasture on a daily basis, which gives them access to nutrient-rich feed. “Our job is to keep stock water in front of them, as well as move the fence,” said King.

Moving to each paddock is followed by appropriate periods of rest to help maintain the health of the pasture over the long term. The animals learn to follow ranch hands from paddock to paddock, offering a significant side benefit of a low-stress environment for the animals.

“The cattle acclimate to MiG very well,” says King. “They become gentle to handle and they gain extremely well. We’re able to put some very efficient gains on the herd from a cost perspective.”

According to King, “Our experience has taught us that if we want to be efficient, we need to graze lighter animals.” The yearlings are turned out weighing between 500-650 lbs. (187-295 kg), and then brought to market between 850-950 lbs (317-355 kg).

“The big thing is we’ve been able to lower our operating costs by letting the cows harvest the feed rather than relying on hay baling equipment. The cow does a great job of harvesting, and she’s happy to do it. We have not had to feed our mother cows any hay since about 2006,” says King. “The economics have been great for us.”

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**Contact Info:**
Intermountain Irrigation, Inc.
350 N. Interchange
Dillon, MT 59725
406-683-6571

Ranch info:
www.lacensemontana.com

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According to the University of Georgia Cooperative Extension, MiG offers many advantages for most producers:

- Less forage is wasted by animals, allowing stocking density to increase
- Improved persistence of some forage species
- Greatly decreased hay requirements
- Fencing and irrigation equipment developments make grazing systems easier and cheaper to implement
- Improved nutrient distribution
- Environmental stewardship
- Improved animal temperament and handling due to frequent movement and exposure to people
- Increased exposure helps farm managers detect disease or other problems quicker for timely treatment

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“I THINK A LOT OF PEOPLE WHEN THEY FIRST LOOK AT THESE INTENSIVE GRAZING SITUATIONS – ESPECIALLY ON IRRIGATED GROUND – THEY THINK THE LABOR HAS JUST GOT TO BE WAY TOO HIGH. WHAT WE FIND IS THAT IT’S REALLY A LABOR SAVINGS FOR US . . . THE LIVESTOCK REALLY DO THE MAJORITY OF THE WORK.”

– Race King, La Cense Montana Ranch Manager

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Grass is grown to about 10-12” (254-305 mm) tall and grazed down roughly 4-5” (102-127 mm) within a 24-hour period.
NFTrax, an airless wheel design that never goes flat and minimizes wheel ruts, is saving growers time, labor and replacement costs.

There is no comparison to conventional pivot tires, according to growers who are integrating the tires into their farming operation.

Tom Lovegrove of Fairmont, Nebraska, has a goal of changing out as many of his conventional pivot tires as possible to NFTrax because, “the more I have of those, the less trouble I’m going to have down the road.”

**SAVING TIME, TROUBLE AND MONEY**

Lovegrove gives a great explanation of just how onerous it can be to fix a flat tire on a working pivot in the middle of one of his cornfields during a hot, humid Nebraska summer.

“Somebody has to take a tractor out in the mud in the cornfield and change the tire. Hopefully, the tire isn’t ruined and the pivot didn’t get damaged. You have to knock down corn, and take a chain and pick up the system. There are mosquitoes, West Nile, it’s like 110 degrees in the field. No wind, lots of humidity. When you have more tires to take care of, that’s a lot of trouble, time and money,” Lovegrove says. “So, you can see why I’m going to this other tire that doesn’t have any air in it and it will never go flat and it leaves less of a track in the field.”

This other tire is NFTrax, the airless wheel assembly from Zimmatic by Lindsay that reduces wheel rutting and never goes flat. NFTrax consists of a steel rim center and a heavy-duty rubber belt with steel cable core tensioned over 10 pairs of steel drive points.

**FEWER WHEEL TRACKS**

Atkinson, Nebraska, corn and soybean grower Brad Smith likes the NFTrax design because it leaves less tracks in
his field, including a section of his field where two pivot end towers meet and sometimes double water.

“There’s a lot of water right there where the two pivots meet and our end wheel track is always the worst. If we have a pivot get stuck, nine out of ten times it’s on that end tower,” Smith says.

“Wheel tracks have always been a huge problem because we chop a lot of silage and we’re running silage trucks right out there in the field with our choppers. If a truck gets stuck, we have to pull it out and that requires time and labor. Lowering our cost of production is our number one goal.”

Not having to fix flats is equally important to Smith.

“With all of our pivots, we’re looking at hundreds of tires with air in them. The odds of a flat are stacked against us pretty good. We don’t do our own tire work at our shops. You add in another twelve miles to town, the cost of the tire, the time it takes to get those tires fixed. If you were to add all that up, it’s a pretty good number there. Our goal is to slim that down, which would be huge for us.”

WORTHWHILE LONG-TERM INVESTMENT
In Texas, Dimmitt corn and wheat grower Zay Bradley has two sets of NFTrax on his pivots. “As far as flats go, NFTrax has solved that problem. Long-term, I think they are worth the extra cost because of no flats. I don’t foresee as much expense on maintenance,” Bradley says.

Rick Gardner, farm manager at Don Opplinger Farms at Atkinson, Nebraska, says no flats, less of a tire footprint and no downtime during peak irrigation season are the main reasons he is transitioning to NFTrax instead of conventional tires.

“The biggest thing I like about NFTrax is that they don’t leave near the footprint. We’ve had good luck with them in rougher terrain. One of the worst things that can happen is getting a pivot stuck and having downtime. It can cause you yield loss and time is money,” Opplinger says.

“Usually, if you have a tire flat out in the middle of the field, it takes a couple of hours to change it because you have to go out there, carry the jack, roll the tires back and forth. In the long-term, I think the NFTrax is a money-saving deal.”

For more information on NFTrax airless wheel assembly, including a five-year warranty, visit www.zimmatic.com/nftrax-2 or your local Zimmatic by Lindsay dealer.
changing the shape of potato research

HOW CENTER PIVOTS AND PRECISION VRI ARE GIVING RESEARCHERS AT WASHINGTON STATE UNIVERSITY (WSU) MORE FLEXIBILITY AND MORE DATA
The WSU Potato Group conducts about 40 research trials a year. Graduate students and faculty plant early to late harvest potatoes for a wide variety of agronomy and physiology research trials, including some designed to identify water-efficient and stress-tolerant potato varieties.

This research is helping define the 4.3 billion-dollar potato business in the U.S., where America’s love of all-things-potato drives our annual 128-pound per person (47.77 kg) potato consumption.

“Precision VRI has enabled us to grow different maturing varieties and trials, with different harvest dates under the same pivot,” says Associate Professor and Potato Agronomist Mark Pavek, who conducts research alongside students and fellow Professor and Potato Physiologist Rick Knowles. “We are also able to conduct water-efficiency and irrigation-rate research amongst the other research trials without rigging up a convoluted mess of irrigation equipment and planting between large, irrigation-transition borders. Instead, we use GPS, a computer, and Precision VRI. Precision VRI expanded our research options exponentially.” It’s also helping produce exacting data and preventing test plots from becoming damaged by foot traffic in the field.

“Before Precision VRI, we would have to put research trials into pie-shaped irrigation zones when grown under a pivot. These zones required large, wasteful transition borders for switching from one irrigation rate to the next. We also used different nozzle configurations and various attachments in combination with solid set or lateral-move irrigation systems. Without Precision VRI, one option we utilized was manual shut-off nozzles on the pivots and lateral-move systems. Someone would have to run out there and shut them off. Occasionally you would have to do it when the water was running. That person gets wet,” Pavek says.

“Now if we need to adjust irrigation during the season, we can go into the Precision VRI program that is just for that research trial. It gives us a lot of flexibility.”

VARIABLE RATE IRRIGATION PUTS THE WATER WHERE IT’S NEEDED

“When you plant potato rows, which we do, your research trials tend to be square or rectangular,” says Pavek.

“Because of this, we have to leave some places under a center pivot unplanted and, quite often, we’ll plant peas or a cover crop in that area. With Precision VRI, we are able to adjust irrigation inside of the research trials as well as on the non-crop or cover crop areas to whatever we need. For a cover crop like peas, we adjust our water output to match pea growth, typically less than what we would use on the potatoes. If we aren’t able to plant a cover crop, we can actually shut the water off in the non-crop areas, or keep it lightly watered to prevent wind erosion.

Some of our circles have roads going through them and we prefer not to soak the roads as it is wasteful and can create a muddy mess. Instead, we’ll
apply a light amount of water just to keep the dust down. It’s keeping weeds at bay, too, in those areas where you don’t have anything planted. You’re using less water and it’s going where it needs to go.”

**CHOOSING CENTER PIVOT IRRIGATION WITH VRI**

So, why not use a rectangular lateral-move system instead of a center pivot?

The university had been using a lateral-move system until it was damaged and became inoperable in 2012. The university approached the Washington State Potato Commission to request funding of a new lateral move system.

“We liked using the lateral-move system because it irrigated square and rectangle research plots well, and we were used to that type of system. The Potato Commission actually convinced us that center pivots were the way to go,” says Pavek. “Many

Commissioners farm and they said ‘why don’t you consider a center pivot? You can irrigate a larger area more efficiently with the same span of equipment, and it requires less hands-on management and maintenance.’”

The Commission explained that for the price of one long lateral system, it could fund two or three shorter pivots, irrigating more land. Moreover, by adding the latest VRI technology to the pivots, researchers would have the greatest flexibility to customize watering patterns. “The farmers on the commission have good insight when it comes to purchasing equipment. They go through this process often,” says Pavek.

Pavek and the university are thrilled with the new equipment. And so is Washington State University is studying how potato varieties may grow better with less water through “deficit irrigation by potato variety” research trials.

**PRECISION VRI:**

- Allows for different maturing varieties and trials under the same pivot
- Accommodates different amounts of water at different times of the year
- Provides greater planting flexibility and the ability to make irrigation adjustments through the VRI program

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Individual sprinkler and zone application for different crops and soil types
• Reduces over-watering, runoff and leaching
• Saves on fertigation and chemigation costs
• Eliminates application over obstacles, low/flooded areas and environmentally-sensitive areas like wetlands
• Decreases power consumption
• Less track maintenance

“Variable rate irrigation has changed what we do,” says Pavek. “As our world grows, water is going to be a limiting factor. I think at some point water is going to be so valuable that everybody will have to have some kind of variable rate system. Growers are going to have to tussle it out and see where the savings are. It’s probably a little expensive at first, but it makes sense over time. It’s going to be a huge deal. Common sense just says that.”

NOTE: The Washington State Commission has since merged some of its research funding with Idaho and Oregon Commissions to form the Northwest Potato Research Consortium, which continues to fund research, share information, and support the potato industry.

“Before Precision VRI, we would have to put research trials into pie-shaped irrigation zones when grown under a pivot. These zones required large, wasteful transition borders for switching from one irrigation rate to the next.”

—Mark Pavek, Associate Professor and Potato Agronomist – WSU
A new product is quickly becoming a hit among growers and changing the way they manage their irrigation.

FieldNET® by Lindsay Pivot Control is a new irrigation controller designed to upgrade almost any existing brand of pivot to full remote monitoring including variable rate irrigation control.

“Pivot Control makes it easy to have our older pivots operating like the new ones,” says Kirk Olson, fourth-generation corn grower from Hershey, Nebraska, who installed the system on 32 of his center pivots, which range in age from new to 1970 pivot brands. “We could immediately see the benefits by being able to check and control our entire irrigation system through a computer or smart phone.”

Unlike other remote irrigation control products, Pivot Control mounts at the pivot point and combines with GPS at the end of the pivot for increased precision and greater flexibility. Growers can operate their pivot in the field at the control box or remotely using FieldNET – both elements automatically update together – minimizing the chance for user error. From a smartphone, tablet, or computer, growers can control their pivots and equipment, including pumps, injectors, and monitor sensors for pressure, flow, soil moisture, rainfall, temperature, and other devices in the future.

Reece Andrews, FieldNET Business Manager for Lindsay, says growers looking to reduce labor costs and increase overall irrigation efficiency in
their operations can especially benefit from Pivot Control.

“We could immediately see the benefits by being able to check and control our entire irrigation system through a computer or smartphone.”

– Kirk Olson, Hershey, NE grower

Pivot Control comes standard with basic 360-sector variable rate irrigation (VRI), offering twice the number of sectors available on most basic VRI products. Growers working with agronomists and crop specialists to analyze their unique field conditions can upload custom prescriptions to FieldNET with a touch of a button.

Sutton, Nebraska, grower Dustin Nunnenkamp has Pivot Control on 12 of his older pivots and especially likes the VRI capabilities it provides.

“One of the main reasons we went with Pivot Control is because we use variable rate irrigation in our operation. It allows us to speed up or slow down our pivots according to soil types and the unique water holding capacity of the soils. It makes irrigation much easier and much more precise,” Nunnenkamp says. Growsmart® by Lindsay also offers Precision VRI with unlimited application areas.

Tom Faulkner, raises potatoes, corn, wheat and alfalfa, on his south central Idaho farm near Gooding. Faulkner recently installed Pivot Control on several of his older center pivot irrigation systems, including a pivot manufactured in the mid-1960s.

“This new technology on the older pivots is really handy because you are able to program different irrigation patterns into the system,” Faulkner says. “As long as I have a cellphone signal, I can start and stop my pivots remotely or just move the pivots dry so the guys spraying or applying fertilizer can do their thing.”

Jared Gardner, a grower at Rocky Ford, Colo., has used the product on his Zimmatic pivot and two other pivot brands.

“It is simple, it is very intuitive. And the ability to basically tap into any system and have this product as kind of plug-and-play on there, that’s great. You can take a 30-year-old pivot and bring it right up to date with this unit,” Gardner says.

For more information, visit www.myfieldnet.com/pivot-control or talk to your local Zimmatic dealer.

**ADVANTAGES OF PIVOT CONTROL**

- Upgrades nearly any brand of pivot
- Create unlimited, professional irrigation plans
- Saves time, water, energy
- Basic VRI with 360 sectors
- Technology that goes with you (i.e., leasing land or pivots)

**FIELDNET NOW WITH VARIABLE RATE IRRIGATION (VRI)**

Growers, agronomists and other advisors can upload custom prescriptions to FieldNET easily with exported CSV files from their precision ag software platforms.

FieldNET with basic VRI allows you to control the amount of water applied in up to 360 sectors.
When it comes to pivots, the last thing growers want is downtime during irrigation season. That’s why growers like Terry Hoogland and Terry Gonterman rely on off-season maintenance with Lindsay’s new Full Circle Maintenance Program to keep their equipment operating smoothly during the growing season.

Gonterman has been the farm manager for 20 years at Kowz R Us, a dairy farm owned by Hoogland located in Castleford, Idaho. With around 1,700 cows, growing corn and alfalfa for feed is a big part of the operation. For this reason, it’s important that pivot downtime is kept to a minimum.

Kowz R Us has been working with their local Zimmatic® by Lindsay dealer, Sliman and Butler in nearby Buhl, Idaho, and are enrolled in the off-season maintenance program. As a result of Sliman and Butler’s maintenance checks, Gonterman has noticed a decrease in pivot malfunctions and breakdowns.

“We had been doing it all ourselves, and I thought, we just didn’t know enough about maintenance to keep things running as smoothly as they should,” says Gonterman.

While many Zimmatic dealers have offered a maintenance program for years, Lindsay is now offering the Full Circle Maintenance Program, which allows growers to establish maintenance schedules with local Zimmatic dealers, effectively reducing pivot downtime, preventing expensive emergency repairs and ultimately extending the life of pivots.

**MAINTENANCE BY THE EXPERTS**

Growers can choose between the Basic Plan, which covers overall general maintenance with 10 checkpoints, or the Advanced Plan, which covers 37 checkpoints including a review of drains, grounding, sprinklers, gearboxes, tires and more.

Zimmatic dealers, including the experts at Sliman and Butler, undergo ongoing certifications ensuring they’re qualified to perform these maintenance checks. Annual factory certification includes technical training for new products, electrical systems, design, controls and troubleshooting. Dealers are even trained to perform maintenance on off-brand pivots.

For Hoogland and Gonterman, it’s a good thing Sliman and Butler has extensive knowledge of various pivot brands since the Kowz R Us farm has three Zimmatic pivots and two small off-brand pivots.

“We’ve been doing business with Zimmatic for probably about 15 years or so, and we’ve had really good service,” Gonterman says. “When they offered the Full Circle Maintenance Program, we decided to give it a try. We’ve always had good luck with Sliman and Butler.”

Gonterman says his dealer has caught a lot of issues with their pivot gearboxes, and also keeps Gonterman and the Kowz R Us team well informed about any possible maintenance or repairs. Additionally,
the dealer keeps records of all maintenance checks, and is usually prepared to make any necessary repairs right away.

**ATTENTION FROM THE EXPERTS**

“Zimmatic has plenty of parts on hand, which is unusual in these days,” Gonterman says.

This expert attention gives Gonterman peace of mind, especially since all the pivots on the Kowz R Us farm are more than 10 years old, and some have been operating for 20 years.

“There are a lot of little things that are starting to show up, and the Sliman and Butler guys catch them before they’re a real problem,” Gonterman says. “For example, if there’s a boot that looks like it might start leaking, they catch it and get it fixed before the summer.”

Gonterman believes being enrolled in this maintenance program has helped extend the life of these pivots.

A great dealer-to-grower relationship also goes a long way for Gonterman.

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**“There are a lot of little things that are starting to show up, and the Sliman and Butler guys catch them before they’re a real problem.”**

– Terry Gonterman

He says all of the experts at Sliman and Butler are attentive and strive to help with his pivot needs.

“They’re all really good with anything we need, and they take the time to get us up and going,” Gonterman says. “They’ll be there the same day unless they really get slammed. They put in a lot of hours so we don’t have to lose time during the growing season.”

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**CONTACT INFO:**

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Buhl, ID 83316
(208) 543-4777

1903 E 1700 South
Gooding, ID 83330
(208) 934-8416

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**BENEFITS:**

- Reduces downtime during irrigation season
- Can prevent costly emergency repairs
- Limits drivetrain replacement and improves electrical reliability, which extends the life of your system
- Helps manage water application and enhances the return on your operation’s investment
- Increases resale value
- Performed by factory certified Lindsay dealers
- Includes any brand of pivot

Designed by Lindsay’s world-class engineering experts, Genuine Lindsay Parts are the preferred after-market choice for conversions or repairs, and feature factory-supported warranties.

For more details, talk to your local Zimmatic® by Lindsay dealer.
“PIVOT CONTROL BRINGS NEW LIFE TO MY OLD PIVOTS.”

BEN DEERSON, NEBRASKA GROWER

NEW!

FIELDNET® BY LINDSAY

PIVOT CONTROL

UPGRADE EXISTING PIVOTS TO HIGH-PERFORMANCE REMOTE CONTROL TECHNOLOGY

Change the way you manage your irrigation with FieldNET’s Pivot Control – the cost-effective remote controller that is compatible with almost any brand of pivot.